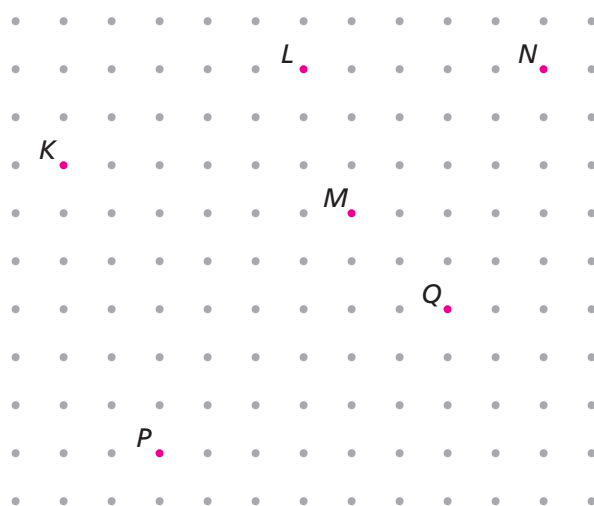


3.3 Finding Distances

In Investigation 2, you found the lengths of tilted segments by drawing squares and finding their areas. You can also find these lengths using the Pythagorean Theorem.

Problem 3.3 Finding Distances

In Questions A–D, refer to the grid below.



- A. 1.** Copy the points above onto dot paper. Draw a right triangle with segment KL as its hypotenuse.
- 2.** Find the lengths of the legs of the triangle.
- 3.** Use the Pythagorean Theorem to find the length of segment KL .
- B.** Find the distance between points M and N by connecting them with a segment and using the method in Question A.
- C.** Find the distance between points P and Q .
- D.** Find two points that are $\sqrt{13}$ units apart. Label the points X and Y . Explain how you know the distance between the points is $\sqrt{13}$ units.

AC Homework starts on page 38.